



University of Hawaii at Manoa

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July 31, 1989
RP:0110

Mr. Manabu Tagomori, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Tagomori:

Application for a Stream Channel Alteration Permit
Aiea Stream
Aiea, Oahu

The above referenced document proposes channelization of approximately 1700 LF of the Aiea Stream as it passes through Aiea Park Place Cluster Subdivision. The review of this application was conducted with the assistance of C. Anna Ulaszewski of the Environmental Center.

The following areas of concern have been noted for further consideration. The increase in impervious surfaces within the area of the subdivision coupled with channelization will change the hydrography of the downstream reaches of Aiea Stream. Since we were not provided with hydraulic information regarding this stream and the affected drainage area, it is impossible to determine whether this change will be significant or not. As a general rule, a channel placed out of equilibrium will tend to adjust in such a way as to approximate unaltered conditions by erosion and deposition. Since the Aiea Stream is intermittent, this may not be a problem; however, this should be taken into consideration.

Also, we note from the blue prints of the project that the stream cross section in the area of the proposed concrete section tends to be trapezoidal. We recommend that a trapezoidal or triangular lowflow design be considered for the concrete section.

Thank you for the opportunity to comment on this document.

Yours truly,

John Harrison
Environmental Coordinator

cc: OEQC
Park Engineering
L. Stephen Lau
C. Anna Ulaszewski

Office of Water Resources Research Center

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